

390610118554201 Local number 110A N14 E27 02DBCD2

Basin and Range basin-fill aquifers

Lyon County, NV

LOCATION.--Lat 39°06'09.6", long 118°55'42.4" referenced to North American Datum of 1983, in SW ¼ NW ¼ SE ¼ sec.2, T.14 N., R.27 E., Lyon County, Hydrologic Unit 16050303.

GROUND-WATER RECORDS

WELL CHARACTERISTICS.--Depth 25 ft. Upper casing diameter 2 in; top of first opening 20 ft, bottom of last opening 25 ft.

WELL USE.--Observation well.

DATUM.--Land-surface datum is 4220 ft above National Geodetic Vertical Datum of 1929. Measuring point: At land surface, 0.0 ft above land-surface datum.

REMARKS.--Walker Lake is a perennial, natural terminal lake that became at-risk because of upstream agricultural diversions. Between 1882 and 1994, upstream diversions caused Walker Lake to decline about 140 feet and the total dissolved solids (TDS) concentrations to increase from 2,500 mg/L to 13,300 mg/L. The Lahontan cutthroat trout (LCT), a threatened species that is native to Walker Lake, has adapted to the high TDS of terminal basins. However, diversions have lowered lake levels and increased TDS to concentrations that threaten the survival of the LCT. The objectives of this project are to develop (1) an improved water budget for Walker Lake and (2) the capability to predict how changes in irrigation practices in and below Mason Valley will affect flows in the lower Walker River so alternatives for supplementing flows can be evaluated.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

[Measurement method: T, electric tape; S, steel tape. Water-level status: A, level affected by atmospheric pressure; - , static; S, nearby site that taps the same aquifer was being pumped.]

Date	Water level	Measurement method	Water level status
Mar 15, 2005	5.64	T	A
May 11	5.15	T	--
Jun 7	2.03	S	--
Jul 12	2.91	S	--
Aug 9	5.99	S	--
16	6.59	S	S
Sep 8	6.12	T	--
27	5.41	T	--

Highest: 2.03 Jun 07, 2005

Lowest: 6.12 Sep 08, 2005